

SKOROVAROV, M., inzhener.

Mistakes made in the reconstruction of grain dryers. Muk.-elev.  
prom.22 no.10:9-11 0 '56. (MLRA 9:12)

1. Tekhnicheskii otdel Ministerstva khleboproduktov RSFSR.  
(Grain--Drying)

SKOROVAROV, M.A., DAMMAN, B.V., kand. tekhn. nauk, red.; DENISENKOVA, L.M.,  
red.; BARANOVA, N.N., tekhn. red.

[Grain drying] Rezhimy sushki zerna. Pod red. B.V. Dammana.  
Moskva, Izd-vo tekhn. i ekon. lit-ry po voprosam khleboproduktov,  
1959. 64 p.

(MIRA 14:5)

(Grain--Drying)

SKOROVAROV, M., inzh.

Research on most efficient thermal conditions for drying grain in stages. Muk.-elev. prom. 25 no.4:18-21 Ap '59. (MIRA 13:1)

1. Ministerstvo khleboproduktov RSFSR.  
(Grain--Drying)

SKOROVAROV, M.

Get the most use out of available grain dryers. Muk.-elev. prom.  
25 no.8:15-18 Ag '59. (MIRA 13:1)

L.Glavnyy inzhener Tekhnicheskogo upravleniya Ministerstva khlebo-  
produktov RSFSR. (Grain--Drying)

SKOROVAROV, Mikhail Antonovich, inzh.; EMMANUEL', Tat'yana Pavlovna,  
inzh.; SAMOYLOVA, G.V., red.; GOLUBKOVA, L.A., tekhn.red.

[Grain cleaning] Ochistka zerna. Moskva, Zagotizdat, 1961.  
63 p. (MIRA 14:12)  
(Grain--Cleaning)

SKOROVAROV, M.

Reconstruction of grain dryers for increased productivity.  
Muk.-elev. prom. 27 no.2:28-30 F '61. (MIRA 14:4)

1. Tekhnicheskoye upravleniye Ministerstva khleboproduktov RSFSR.
2. Glavnyy inzh. Tekhnicheskogo upravleniya Ministerstva khlebopro-  
duktov RSFSR (for Skorovarov).  
(Grain--Drying)

SKOROVAROV, M., inzh.; EMMANUEL', T., inzh.

Reconstructing grain dryer furnaces and converting them to liquid and gas fuels. Muk.-elev. prom. 27 no.6:3-7 Je '61. (MIRA 14:6)

1. Tekhnicheskoye upravleniye Ministerstva zagotovok RSFSR.  
(Grain--Drying)  
(Furnaces--Construction)

SKOROVAROV, M., inzh.

Observing fixed temperatures for grain drying. Muk.-elev.  
prom. 27 no.10:18-20 0 '61. (MIRA 14:12)

1. Tekhnicheskoye upravleniye Ministerstva zagotovok RSFSR.  
(Grain--Drying)

NAZAREVSKIY, L.; SHEVRYGIN, P.; SKOROVAROV, M.; MANUYLOV, A.

Receiving, cleaning, drying, and storing beans. Muk.-elev.  
prom. 28 no.5:14-18 My '62. (MIRA 15:5)

1. Ministerstvo proizvodstva i zagotovok sel'skokhozyaystvennykh produktov RSFSR (for Nazarevskiy, Shevrygin, Skorovarov).
2. Ministerstvo proizvodstva i zagotovok sel'skokhozyaystvennykh produktov Kazakhskoy SSR (for Manuylov).  
(Beans)

SKOROVAROV, M., inzh.

Remodeling the furnace of the ZSPZH-8 grain dryer. Muk.-elev.  
prom. 28 no.12:12-13 D '62. (MIRA 16:1)

1. Vserossiyskoye ob'yedineniye khleboproduktov.  
(Grain--Drying)

AM4024184

BOOK EXPLOITATION

S/0793

Laskorin, B. N.; Zefirov, A. P.; Skorovarov, P. I.

Extraction of uranium from solutions and pulps (Ekstraktsiya urana iz rastvorov i pul'p) Moscow, 1960. 24 p. illus., biblio. No. copies printed not given. (At head of title: Glavnoye upravleniye po ispol'zovaniyu atomnoy energii pri Sovete Ministrov SSSR)

TOPIC TAGS: uranium extraction, uranium ore

PURPOSE AND COVERAGE: Data are presented concerning the extraction of uranium from the sulfate, nitrate, hydrochloric, and phosphate solutions and pulps most frequently encountered in the hydrometallurgy of uranium. Esters of carboxylic, phosphoric, and phosphinic acids, and liquid cation and anion solutions are investigated as extraction agents that are most convenient for industrial application. The process of extracting uranium from thick ore pastes is described for the treatment of high-grade uranium ores.

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TOLSTOV, Yu.G., doktor tekhn.nauk; SKOROVAROV, V.Ye., inzh.

Transducer for automatic controllers in d.c. systems.  
Elektrichestvo no.4:63-65 Ap '62. (MIRA 15:5)

1. Moskovskiy fiziko-tekhnicheskiy institut.  
(Electric power distribution--Equipment and supplies)

SKOROVAROV, V.Ye.

Autonomous voltage inverters using controlled silicon valves.  
Elektrichestvo no.5:51-55 My '64. (MIRA 17:6)

1. Moskovskiy fiziko-tekhnicheskij institut.

SKOROVAROV, V.Ye., moskovskiy fiziko-tekhnicheskiy institut

Operation of the rectifiers in autonomous inverter circuits with  
increased frequency. Elektrichestvo no.3:21-26 Mr '65.

(MIRA 18:6)

L 4899-66

ACC NR: AP5026307

UR/0144/65/000/008/0923/0930  
621.3.072.2 + 621.314.6

AUTHOR: Pyrkov, V. V.; (Senior lecturer); Skorovarov, V. Ye. (Head of electronics dept)

TITLE: Stabilized rectifier controlled by a saturation choke

SOURCE: IVUZ. Elektromekhanika, no. 8, 1965, 923-930

TOPIC TAGS: electronic rectifier, stabilizer, semiconductor device, control circuit, voltage stabilizer

ABSTRACT: Power rectifiers may be controlled either by circuits containing control valves or by incorporating saturation chokes into the control circuits. A comprehensive theoretical discussion of the problem with particular emphasis on the saturation choke approach shows that by using chokes as integrating components reacting to the variations in the mean value of the power supplying voltage, it is possible, in principle to construct a regulator of the rectifier voltage sensitive to the deviation of the input quantity. This possibility was tested on a device which uses semiconductor circuitry shaping across the choke voltages of the required form and supplies at the instant of saturation a control pulse feed to the auxiliary rectifier valve. The circuit is shown in Fig. 1 of the Enclosure. Tests show that such a device can be used in conjunction with rectifiers handling power from a few tens to several thousands of kilowatts. The experimental unit representing the simplest possible version of the device was capable of stabilizing the output voltage within  $\sim 1.3\%$  for input voltage

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changes of 10%. The response of such a rectifier during changes in load or in the input voltage is faster than 1.5 periods in the case of simple phase power supplies and faster than a whole period in the case of 3-phase systems. Orig. art. has: 10 formulas and 4 figures.

ASSOCIATION: Kafedra Elektroniki Moskovskogo Fiziko-tehnicheskogo instituta  
(Department of Electronics, Moscow Institute of Physics and Technology)

SUBMITTED: 25Jul64

ENCL: 01

SUB CODE: EC

NO REF SOV: 004

OTHER: 000

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L 4899-66

ACC NR: AP5026307

ENCLOSURE: 01

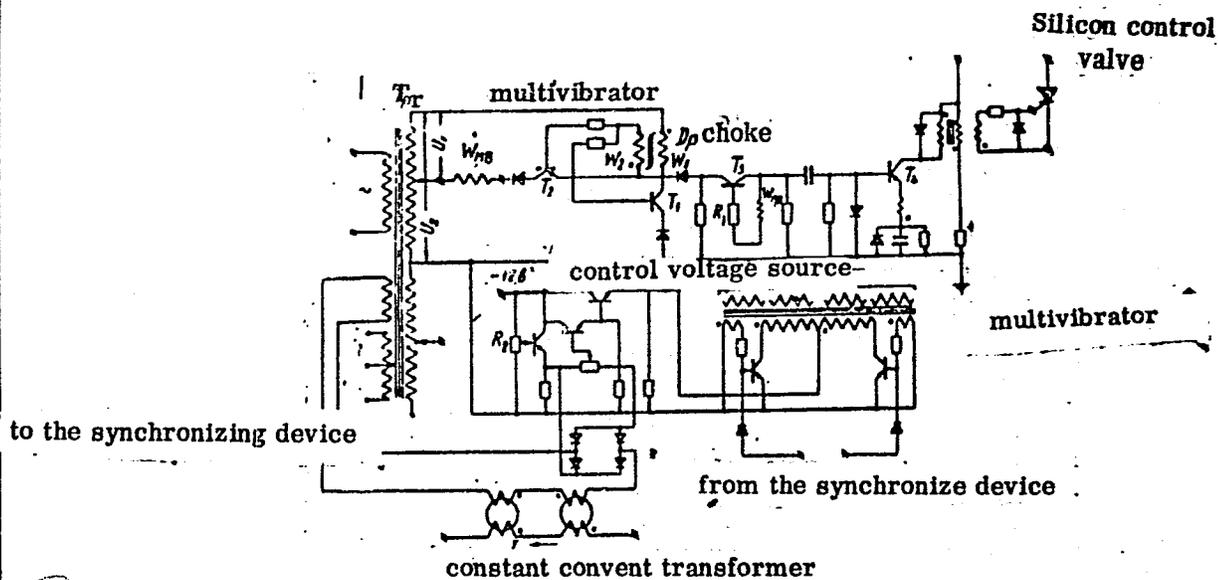


Figure 1. Principles of the rectifier control circuit.

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L 11000-86 EWT(1)/EEC(k)-2/T/EWA(h) IJP(c)

ACC NR: AP6004975

SOURCE CODE: UR/0105/65/000/003/0021/0026

AUTHOR: Skorovarov, V. Ye.

ORG: Moscow Physicotechnical Institute (Moskovskiy fiziko-tekhnicheskiy institut)

TITLE: Operation of rectifiers in self-inverter circuits at higher frequency

SOURCE: Elektrichestvo, no. 3, 1965, 21-26

TOPIC TAGS: rotary inverter, semiconductor rectifier, electronic circuit, semiconductor diode, capacitor

ABSTRACT: The article deals with the application of silicon inverters (thyristors) to the conversion of direct current into alternating current of 400-2000 cps frequency. In the design of such inverter circuits, consideration must be given to heat dissipation during commutation and to the large surge currents. If the load is capacitive, the build-up of current in the small transition zones may also become dangerous and may result in failure of the rectifier unit. The article analyzes this current build-up on the most common example of an inverter circuit with the commutating capacitors in parallel. The self-capacitances of the rectifier are disregarded for simplification and the entire inverter during switching is represented by its two-diode or two-transistor analog. The current relations are derived and oscillograms (current and voltage) during commutation are shown. It is pointed out that in order to overcome the current build-up, the latter must be limited over a short period of time (5-10 micro-

Card 1/2

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L 11000-66

ACC NR: AP6001975

seconds). It is also shown that the accumulated charge flowing in the reverse direction depends solely on the d-c current and is proportional to it. Thus, the d-c supply voltage must be delayed by a certain time during the turning-off process. A modified inverter scheme is then described having: 1) saturable reactors wound on square-loop cores in series with the SCR's, 2) plain diode rectifiers (non-controlled) in series with damping capacitors shunted by discharge resistors in parallel with the SCR's. This arrangement eliminates overvoltages during commutation and sharply reduces the current build-up in the rectifiers. The use of diodes instead of resistors makes the inverter more costly but it reduces the size and improves the reliability. If the diodes can withstand high inverse peak voltages, then the capacitors may be omitted. Orig. art. has: 6 figures and 9 formulas. [JPRS]

SUB CODE: 09 / SUBM DATE: 17Mar64 / ORIG REF: 005 / OTH REF: 001

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Card 2/2

PYRKOV, Valentin Valentinovich, starshiy prepodavatel'; SKOROVAROV, Vladimir  
Yefimovich

Stabilized rectifier controlled by saturable reactors. Izv.vys.ucheb.  
zav.; elektromekh. 8 no.2:923-930 '65.

(MIRA 18:10)

1. Kafedra elektrotehniki Moskovskogo fiziko-takhnicheskogo instituta  
(for Pyrkov). 2. Zaveduyushchiy kafedroy elektrotehniki Moskov-  
skogo fizikotakhnicheskogo instituta (for Skorovarov).

SKOROVAROVA, M., iskusstvoved (Tashkent, Uzbekskoy SSR)

In Uzbekistan; what causes the extinction of folk handicraft. Vest.prom.  
i khud. promys. 3 no.1:34-35 Ja '63. (MIRA 16:2)

1. Muzei prikladnogo iskusstva Uzbekistana.  
(Uzbekistan--Handicraft)

SKOROWA, Irena; DOLINSKA, Grazyna

Allergic angina pectoris associated with bronchial asthma. Polski tygod. lek. 16 no.9:343-345 27 F '61.

1. Z I Kliniki Chorob Wewnętrznych A.M. we Wrocławiu; kierownik: prof. dr Zofia Czesowska.

(ASTHMA compl) (ANGINA PECTORIS compl)

ROSLAWSKI, Adam; SKORCWA, Irena; PACIOREK, Maria

A case of severe gout with hepato-lienal syndrome. Reumatologia  
(Warsz.) 1 no.1:61-70 '63.

1. Z Oddziału Reumatologicznego Szpitala Wojewodzkiego im.  
J. Babinskiego we Wrocławiu (Ordynator Oddziału: dr med. A.  
Roslawski; Dyrektor Szpitala: dr med. F. Sass).

CZESZCZANSKA, Zofia; KOWAL-GLEBOZAK, Barbara; ROSLANSKI, Adam; SKORUMA  
Irena ; KRZYSCZAK, Maria

Effect of methylene blue on the excretion of 17-hydroxycorticosteroids and on the clinical picture of patients with chronic progressive rheumatism. Col. tyg. lek. 19 no.45: 1713-1715 N 9'64

1. Z I Kliniki Chorob Wewnętrznych Akademii Medycznej we Wrocławiu (Kierownik prof. dr. med. A. Kleczewski) i z Oddziału Reumatologicznego Szpitala Wojskowego im. J. Babinskiego we Wrocławiu (Ordynator dr. med. Adam Roslawski).

ROSLAWSKI, Adam; SKOBIWA, Irina

Pharmacological therapy of gout. Reumatologia (Warsz.) 2  
no.3:263-288 '64.

1. Z Oddziału Reumatologicznego Szpitala Wojewodzkiego im.  
J. Sabinskiego we Wrocławiu (Ordynator Oddziału: dr med. A.  
Roslawski Dyrektor Szpitala; dr med. F. Sass).

CZEZOWSKA, Zofia; KOWAL-GIWCZAK, Barbara; ROSLAWSKI, Adam; SKOROWA,  
Irena; WRZYSZCZ, Maria

Effect of cold on the urinary excretion of 17-hydroxycorticosteroids  
in patients with chronic progressive rheumatism. Reumatologia  
(Warsz.) 2 no.4:321-329 '64

1. " I Kliniki Chorob Wewnetrznych Akademii Medycznej we  
Wroclawiu (Kierownik: prof. dr. med. A.Kleczenski) i z  
Oddzialu Rumatologicznego Szpitala Wojewodzkiego im. J.Babinskiego  
we Wroclawiu (Ordynator Oddzialu: dr. med. A. Roslawski).

SKORPIK, E. TRKALA, R.

Automatization of the sorting of rollers for roller bearings. p. 237.

(Lk/Nb). Machines for earth running. p. 240.

(Technicka Praca. Vol. 9, no. 4, Apr. 1957. Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.



CA SKORPIK, P

12

The digestibility and feeding value of the clover and grass hay. J. Herzig, P. Štěpánek, and J. Nakládal (Ústav pro výživu a krmiva hosp. zvířat, Brno a Pěstování stánek chov. pastev., Rapotín, Czech.). *Sborník Českoslov. Akad. Zvěřinnictví* 23, 226-75(1961).—The nutrients, coeffs. of digestibility, and feeding values in the clover-grass hay of the second cutting are much higher than the first and indicate that the time of cutting the first crop should be shifted to the earlier stage of vegetation of clover grasses. The same values of the first cutting in the red-clover hay are much better than the first cutting of the clover-grass hay but not as good as the second. There was a high feeding value in both crops of the mixts. of the red clover with French ray-grass (*Arrhenatherum squarrosum*). The hectare yields of nutrients did not differ much in the individual mixts. and the best ones were red clover with *Arrhenatherum squarrosum* and with fescue (*Festuca pratensis*). The hectare yield of the second crop was almost one half of the first but in the second one was only 13.5% lower in the digestible protein. On the basis of new expts. it was proven numerically that the first crop of clover grasses has a lower protein content than the pure culture of red clover and that the cutting of clover grass should be in an earlier stage of vegetation than the pure culture of red clover; thus the protein in the farm fodder is increased. Jan Micko

1957

SKORPIK, VLADIMIR

0003

Skorpiik, Vladimir. On hyperosculating conic sections.  
Casopis Pest. Mat. 80 (1955), 232-241. (Czech)

I-F/W

*[Handwritten initials]*

CZECHOSLOVAKIA/Virology - Chlamydozoa.

E-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, 47835

Author : Skorpil, J., Vykýdal, A.

Inst : -

Title : The Ornithosis Epidemic in Eastern Czechoslovakia.

Orig Pub : Prakt Lekar, 37, No 14, 639-640 (1957) (in Czech)

Abstract : No abstract.

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- 6 -

PETRELE, M.; SKORPIL, J.; KORHON, M.

Block of both Tawara's node branches. Cas.lek.cesk. 99 no.10:  
298-302 4 Mr '60.

1. I. interni klinika v Hradci Kralove, prednosta prof. MUDr.  
J. Rehor. Interni oddeleni OUNZ Vysoke Myte, prednosta MUDr.  
J. Skorpil. Pat-anat. ustav v Hradci Kral, prednosta prof.  
MUDr. A. Fingerland.

(HEART BLOCK case reports)

SKORPIL, V.

A contribution to the standardi-ation of the width of city streets. p. 296.

(Pozemni Stavby. Vol. 5, no. 6, June 1957. Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

SKORPIL, V., As., dr.

Lesions of the nervous system in infectious mononucleosis.  
Neur. & psychiat. cesk. 18 no. 6:442-449 Nov 55.

1. Z infekcniho oddeleni SFN Plzen, prednosta primar Dr. J.  
Zdaril a z neurologicke kliniky Plzen, prednosta prof. Dr. V.  
Pit'ha.

(NERVOUS SYSTEM, diseases,  
caused by infect. mononucleosis. (Cz))  
(INFECTIOUS MONONUCLEOSIS, complications,  
NS dis. (Cz))

KOLAROVA, J., Dr; SKORPIL, V., Dr

Rheumatic serous meningitis. Fysiat.vest., Praha 33 no.5:180-182  
Oct 55.

1. Z infekcniho oddeleni SFN Plzen, prednosta primar Dr J.Zdaril  
a z neurologicke kliniky lekarske fakulty v Plzni, prednosta prof.  
Dr V.Pit'ha

(MENINGITIS,  
rheum. serous)  
(RHEUMATIC FEVER,  
rheum.serous meningitis)

SKORPIL, V., Dr.; VYKLICKY, L., Dr.

Hemibalism. Cesk. neur. 19 no.2:130-134 May 56.

1. Z neurologické kliniky v Plzni, přednosta prof. Dr. V. Pitha.  
(CHOREA,  
hemibalism (Cz))

EGERMAJEROVA, R., Dr.; SKORPIL, V., Dr.

Postpartum thrombosis of intracranial sinuses and veins.  
Cas. lek. cesk. 95 no.20:543-545 18 May 56.

1. Neurologicka klinika v Plzni. Predn. prof. Dr. Pitha.  
(PUERPERIUM, compl.  
thrombosis of intracranial sinuses and cerebral  
veins (Cz))  
(SINUS THROMBOSIS,  
puerperal, with cerebral thrombosis (Cz))  
(CEREBRAL THROMBOSIS AND EMBOLISM,  
puerperal, with sinus thrombosis (Cz))

SKORPIL, V.

KAREL, V., Dr.; SKORPIL, V. Dr.

Air embolism caused by puncture of the maxillary sinus. Cesk. otolar.  
6 no.3:146-150 June 57.

1. Klinika nemoci usnich, nosnich a krecnich v Plzni, prednosta  
prof. Dr. F. Kotyza, a neurologicka klinika v Plzni, prednosta  
prof. Dr V. Pitha.

(CEREBRAL EMBOLISM AND THROMBOSIS, etiol. & pathogen.

puncture of maxillary sinus causing air embolism (Cz))

(MAXILLARY SINUS, wds. & Inj.

puncture causing air embolism of brain (Cz))

SKORPIL, VLADIMIR  
NEUWIRT, Jan; SKORPIL, Vladimir; MARA, Milan

Free amino acids in cerebrospinal fluid. Cesk. neur. 20 no.5:314-318  
Sept 57.

1. Ustav experimentální pathologie lékařské fakulty KU v Plzni,  
prednosta doc. Dr. Jan Hrbek Ustav lékařské chemie lékařské fakulty  
KU v Plzni, prednosta doc. Dr. Jan Stepan, Neurologické klinice  
lékařské fakulty KU v Plzni, prednosta prof. Dr. Vaclav Pitha.  
(AMINO ACIDS, in cerebrospinal fluid  
free amino acids (Gz))

SKORPIL, V

NESNIDALOVA, R.; NEUWIRT, J.; SKORPIL, V.

Significance of glutamic acid for the nervous system. Cesk.  
psychiat. 53 no.2:96-100 Mar 57.

1. Ustav experimentalni pathologie, psychiatricka a neurologicka  
klinika v Plzni.

(MENTAL DISORDERS, ther.

glutamic acid (Cz))

(GLUTAMATES, ther. use

glutamic acid in ment. disord. (Cz))

HNIK, P.; SKORPIL, V.

Certain factors influencing denervation fibrillation in the skeletal muscles in rats. *Cesk. fysiolog.* 7 no.3:224-225 May 58.

1. Fysiologicky ustav CSAV, Praha.

(MUSCLES, physiol.

post-denervation fibrill., eff. of blood supply (Cz))

DRECHSLER, B.; SKORPIL, V.

Recent studies on the innervation of the striated muscle. *Cesk. fysiол.*  
7 no.4:308-315 July 58.

1. Neurologicka klinika KU a Fysiologicky ustav CsAV, Praha.  
(MUSCLES, innervation,  
striated musc., review (Cz))

HNIK, P.; SKORPIL, V.; JANDA, V.

Denervation fibrillation of the striated muscle in rats. *Cesk. fysiол.*  
7 no.5:468 Sept 58.

1. Fysiologicky ustav Csav, Neurologicka klinika LFHKU Praha.  
(MUSCLES, physiol.  
denervation fibrill. in rats (Cz))

SKORPIL, V.; DRECHSLER, B.

Gamma system. Cas. lek. cesk. 97 no.34:Lek. veda zahr 180-185 22 Aug  
58.

1. Fysiologicky ustav CASV v Praze a neurologicka klinika KU v Praze.  
(NERVOUS SYSTEM, physiology,  
gamma neural system control of motor system, review (Cz))  
(MOVEMENTS, physiology,  
same)

SKOPEL, V.; DRUCHSLER, B.; JANDA, V.; FRITZER, F.

Pharmacological influences on reflex neuromuscular irritability in spastic subjects. *Cesk. fysiolog.* 8 no.3:249-250 Apr 59.

1. Fysiologicky ustav CSAV, Neurologické kliniky lek. fak. KU. Praha 2 a Praha 12 a Jedlickuv detsky ustav. Praha. Predneseno na III. fysiologických dnech v Brne, den 14. 1. 1959.

(CHLORPROMAZINE, eff.  
on neuromuc reflex irritability in spastic subjects (Cs))

(PARALYSIS, physiol.  
eff. of chlorpromazine on neuromusc. reflex irritability in  
spastic subjects (Cs))

SKORPIL, V.;JANDA, V.

Electrophysiological determination of the effect of drugs in patients  
with perinatal encephalopathies. Cesk. fysiол. 8 no.6:559 H '59

1. Fysiologicky ustav CSAV, Neurologicka klinika Lek. fak. hyg.  
KU. Praha.

(ELECTROMYOGRAPHY)

(INFANT NEWBORN, dis.)

(BRAIN, dis.)

DRESCHLER, B.; JANDA, V.; PFEIFFER, J.; SKORPIL, V.

Reflex irritability of spinal and peripheral structures in spastic paralysis. *Cesk. neur.* 22 no.3:186-190 May 59.

1. Neurologicka klinika KU. v Praze, prednosta akademik prof. K. Henner. Neurologicka klinika KU. v Praze 12, prednosta prof. dr. J. Sebek  
Jedlickuv detsky ustav Praha 14, prednosta dr. F. Krivanek Fysiologicky ustav CSAV Praha 16, red. doc. dr. Z. Servit.

(PARALYSIS, physiol.

reflex irritability of spinal & peripheral structures  
in spastic paralysis (Cz))

SOBOLOVA, V.;SKORPIL, V.

Participation of the striate muscles in restoration processes in animals adapted to low environmental temperature. Cesk. fysiол. 9 no.1:51-52 Ja 60.

1. ITVS-Fakulta telesne vychovy, Fysiologicky ustav CSAV, Praha.  
(ACCLIMATIZATION)  
(MUSCLES physiол.)

JANDA, V.; SKORPIL, V.; VELE, F.

Fibrillation activity of a denervated muscle in poliomyelitis patients influenced experimentally. Cas.lek.cesk. 99 no.18:551-553 29 Ap '60.

1. Neurologicka klinika LFHKU Praha 12, Fyziologicky stav CSAV  
Praha 6, Janske Lazne.  
(POLIOMYELITIS physiol.)  
(MUSCLES physiol.)

SKORPIL, V.

Recent findings on reflex spinal cord activity from the viewpoint  
of muscle proprioceptors. Cesk. neur. 24 no.2:110-116 Mr '61.

1. Neurochirurgická klinika fakulty všeobecného lékařství KU Praha-  
Stresovice, přednosta prof. MUDr. Z. Kunc.

(SPINAL CORD physiol)  
(MYONEURAL JUNCTION physiol)

SKORPIL, V.; KOLMAN, J.

Measurement of the speed of conduction of peripheral nerves in clinical conditions. *Cesk. neur.* 24 no.3:161-165 My '61.

1. Neurochirurgická klinika fakulty všeobecného lékařství KU v Praze, přednosta prof. MUDr. Z. Kunc Fyziatické oddělení Ústřední vojenské nemocnice v Praze, přednosta MUDr. V. Státný.

(PERIPHERAL NERVES dis)

SKORPIL, Vl.; VLADYKOVA, J.

Principles of electromyography of the oculo-rotatory muscle. Cesk. oftal. 18 no.5:378-382 S '62.

1. Neurochirurgická klinika fakulty všeobecného lékařství Karlovy university v Praze, přednosta prof. dr. Z. Kunc Oční oddělení UvH v Praze, přednosta doc. dr. V. Jensi.  
(OCULOMOTOR MUSCLES) (ELECTROMYOGRAPHY)

KUNCOVA, Z.; SKORPIL, V.; KREDBA, J.

Electromyographic studies of children with spasmophilic symptoms.  
Cesk. neurol. 25 no.1:11-16 Ja '62.

1. Detske oddeleni fakultni polikliniky v Praze 2 Neurochirurgicka  
klinika v Praze-Stresovicich a fyziatricke oddeleni UVN v Praze-  
Stresovicich.

(ELECTROMYOGRAPHY in inf & child)  
(SPASMOPHILIA in inf & child)

SKORPIL, V.; VLADYKA, V.

Conduction velocity in the corticospinal tract in man. *Physiol. Bohemoslov.* 12 no.5:484-487 '63.

1. Department of Neurosurgery, Charles University, Prague.  
(SPINAL CORD) (NEUROSURGERY)  
(ELECTROPHYSIOLOGY) (ELECTROMYOGRAPHY)  
(PARALYSIS AGITANS) (CEREBRAL CORTEX)

SKORPIL, Vl.; VLADYKOVA, J.; ZVERINA, E.

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1. Neurochirurgická klinika fakulty všeobecného lékařství KU v Praze, přednosta prof. dr. Z. Kunc, DrSc. Oční oddělení UVN v Praze, vedoucí doc. dr. V. Jenší.

(ELECTROMYOGRAPHY) (OCULOMOTOR MUSCLES)  
(PERIPHERAL NERVE DISEASES) (MYONEURAL JUNCTION)  
(MUSCULAR DISEASES)

METELKA, M.; SKORPIL, V.; ZVERINA, E.; CERNA, J.

On the surgical treatment of facial nerve paralysis with the use of tissue adhesives. Cas. lek. cesk. 102 no.44:1216-1219 1 N '63.

1. Neurochirurgicka klinika fakulty vseobecneho lekarstvi KU v Praze; Ustredni vojenska nemocnice, (prednosta prof. dr. Z. Kunc, DrSc.) a Fyziatricke oddeleni UVN v Praze, nacelnik MUDr. V. Stastny.

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1. Neurochirurgická klinika FVL KU Praha-Stresovice; pred-  
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Karlovy University v Praze, (prednosta dr. Z. Kunc. DrSc.).



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March 1955, Incl.

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Building new lots of the proprietors of individual farms. p. 11.  
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Bulgarian standardized buildings. p. 17. (Budownictwo Wiejskie, Vol. 8, No. 7, July 1956, Warsaw, Poland)

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BRUNO, A.

Stables for horses, n. 27.

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Incl.

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Construction for cultural purposes within the framework of social arts. p. 10

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Gospodarstw Rolnych) Warszawa, Poland. Vol. 11, no. 10, Oct. 1959

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SKORSKI, Aleksander, inz.

Production of ready made standardized lumber for the needs of  
construction of farmhouses. Budown Wiejskie 14 no.4:21-22 Ap '62.

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p. 118 (DROGOWNICTWO, Vol. 8, No. 5, May 1953) Warszawa, Poland

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"Acceptance of work in investment road construction." p. 203

SO: MONTHLY LIST OF EAST EUROPEAN ACCESIONS, L.C., Vol. 3, No. 4, APRIL 1954

SKORSKI, J.

"Role of Geologists in Road Construction," P. 308. (DROGOWNICTWO, Vol. 8, No. 12, Dec. 1953. Warszawa, Poland)

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SKORSKI, J.

"Causes of Mistakes Occurring in Road Construction and How to Avoid Them."  
p. 140, (DROGOMIETC, Vol. 9, No. 6, June 1954. Warszawa, Poland.)

SO: Monthly List of East European Accessions, (EEAL), LC,  
Vol. 3, No. 12, Dec. 1954, Uncl.

SKORSKI, J.

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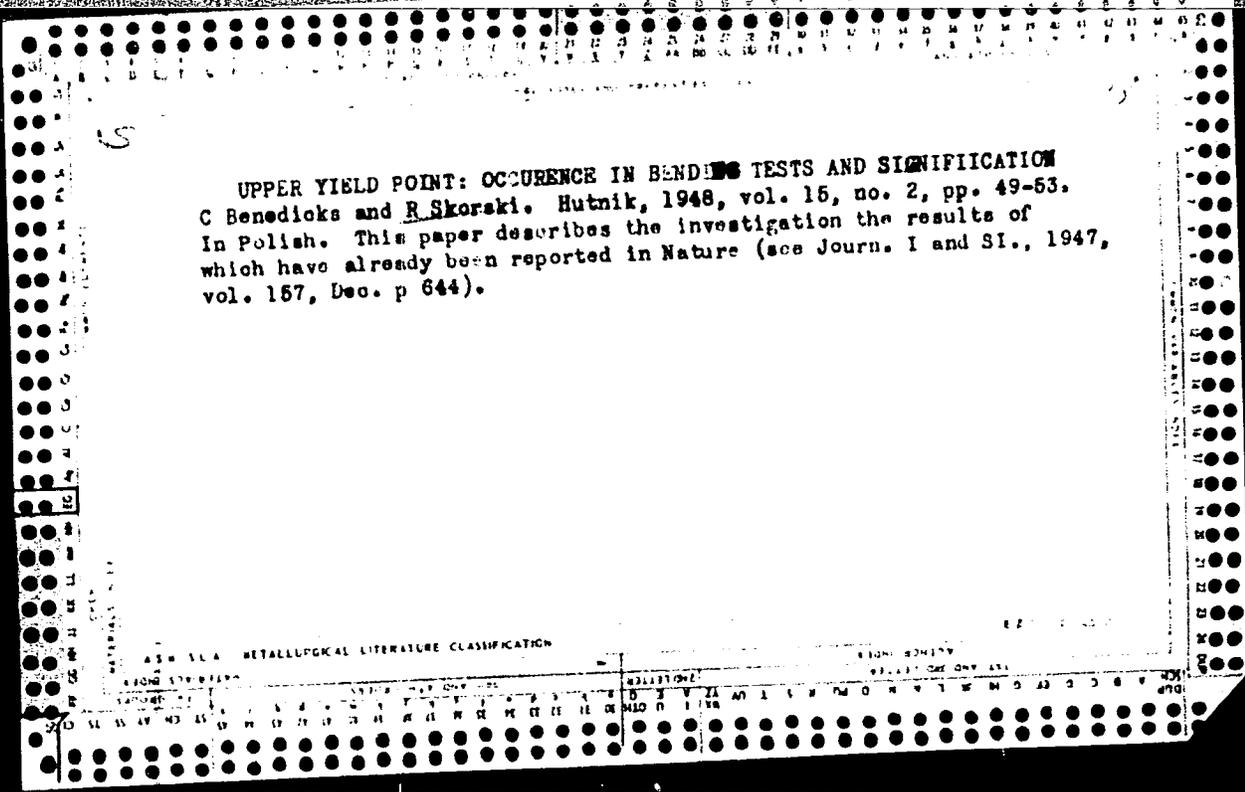
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SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 10, October 1957. Uncl.



PROCESSES AND PROPERTIES INDEX

9

Ca

Synthetic alloys with hard skeleton. Roman Skórski. *Hutnik* 15, 116-18(10-58).—If hard substances are deposited on grain boundaries of an alloy, its fusing point rises and with it its ultimate elasticity. These test results gave the author the idea to produce a synthetic alloy formed by a hard skeleton, e.g. porous iron sponge, filled out by a soft metal. A soft alloy with a hard skeleton possesses a considerably higher bending strength than the same alloy without a hard skeleton. These tests revealed the possibility of preparing alloys from two substances with different mech. properties, as in the case of concrete steel. In the production of bearings, Cu powder could be baked into a porous state and impregnated with soft Pb. These alloys could be used in the production of fire-proof materials and of turbomachinery propellers. The porous hard skeleton is easily shaped from powder along desired lines. Metals with high m.p. or some carbonates or nitrates may be used for the hard skeleton. A considerable admixture of Cr (over 20%) to the impregnating alloys is suggested, because such alloys are corrosion proof at high temp. In some cases a small addn. of Ag to the impregnating alloys is advisable because this raises the moistening properties of the alloys with respect to the impregnated metallic skeleton. S. Nowinska

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



D. T. A.

metallurgy  
5

300

669.295 : 669.14

Skórski, R., Dr. Eng. Titanium and its Role in Steel Metallurgy.

„Titan i jego rola w metalurgii stali“. Hutnik. No 7—8, 1956, pp. 226—231, 5 figs., 3 tabs.

The common occurrence of titanium in nature, its chemical properties and compounds, are discussed. Titanium, as an alloy supplement to iron, increases several of the positive properties of steel. Enumeration of these properties. The author, taking for a basis the relatively cheap compound  $TiO_2$ , has produced a compound  $NaTiN$ , for which he uses the term „titanek sodu“. He produced this compound by melting  $TiO_2$  with  $NaCN$  in a graphite crucible. The product obtained, after caking in  $1300^\circ C$ , lost sodium and passed probably into compound:  $Ti_3C_2N_3$ . This compound would be a very suitable deoxidizing addition in the process of steel production.

SKORSKI, ROMAN

~~Titanium and its role in metallurgy. Roman Skórski~~  
 (Główny Inst. Fizyki Techn., Poland). *Hutnik* 17, 228-31  
 (1950).—S. prepared a new compd.  $NaTiN$  (I) from  $TiO_2$   
 and  $NaCN$ . He suggested its use as a cheap deoxidizing  
 agent for steel.  $TiO_2$  and  $NaCN$  in mol. proportion 1:1  
 were melted in a graphite crucible.  $NaCN + TiO_2 = Na-$

$TiN + CO$ . A violent melting started at  $800^\circ$  but soon the  
 mass became a solidified sponge. In order to complete  
 the reaction, heating was continued for 4 hrs. at  $1000^\circ$  in a  
 atm. of N. After cooling the product was black and had a  
 compn. as follows: Ti 57, Na 24, N 14, and C 2%. The C  
 may have come from the crucible. When heating was  
 continued up to  $1300^\circ$  Na evolved. An approx. compn.  
 of the product was  $Ti_{10}C_2N_4$ . I had good deoxidizing proper-  
 ties for steel because of its Ti and Na content. The presence  
 of N in I was especially desirable for steel of high-N content  
 and for alloys of the kanthal type. S. named I sodium tita-  
 nide in analogy to cyanide. F. J. Hendel

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E.H. V-48  
 Jan 11, 1954  
 Metallurgy &  
 Metallurgy

KOKOKI, P.

me  
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E.A. V-48  
Jan 10, 1954  
Metallurgy &  
Metallography

~~Addition of titanium and both titanium and nitrogen to steel. Roman Skorski (Ministerstwo Szkol Wyzszych i Nauki, Poland). Hutnik 17, 290-8(1950). Steel is covered with a corrosion-resistant film of Ti and TiN by submerging it in molten  $\text{Na}_2\text{TiO}_3$  and heating it afterwards in molten  $\text{NaCN} + \text{TiO}_2$ . Neither electrolysis of Ti phosphate and  $\text{TiF}_4$  in water soln., nor electrolysis of molten  $\text{TiF}_4$ , nor covering the steel with Ti powder and heating up to  $1160^\circ$  in N produced a corrosion-resistant film. Good results were only obtained when steel was kept for 1 hr. at  $890-920^\circ$  in molten  $\text{TiO}_2 + \text{NaOH}$ . The resultant film (I) was 0.015-0.02 mm. thick. The above temp. coincides with the temp. at which allotropic changes of Fe and Ti take place. Graphite crucible and petroleum oil for heating were used. Submerging in molten  $\text{TiO}_2 + \text{Na}_2\text{CO}_3$  caused addn. of C to steel and hence was not satisfactory. Addn. of TiN (or  $\text{Ti}_3\text{C}_2\text{N}_4$ ) film (II) of 0.005 mm. thickness was carried out by submerging the sample, already covered with I into a molten mixt. of  $\text{TiO}_2 + \text{NaCN}$  at  $900^\circ$  just before solidification of the mixt. took place (cf. preceding abstr.). Ti does not cause galvanic action with Fe as both have nearly the same potential. Samples with I were kept for 12 months in the atm. of the lab. No corrosion took place while ordinary steel was fully corroded. Steel with II was corrosion-proof against acetic and inorg. acids and also against sea water. The samples with II were not oxidized by air up to  $400^\circ$ .~~  
F. J. Hendel

SKORSKI, ROMAN

P O L .

~~Substitution of nickel by iron in aluminum alloys. Stanislav Gebalski, Zdzislaw Ponkowiński, and Roman Skórski (Inst. Met. Apparatury Nauk., Lab., Warsaw). *Prace Inst. Met.* 4, No. 12, 1-10 (1954).~~ With consideration of electronic theories of the metallic bond, it is shown that Ni can be partly substituted by Fe in Al alloys grade "Y" (which is a Russian designation). The original alloy contained Ni 1.95 (grade Y can contain Ni up to 2.25%), Fe 0.25, Mg 1.55, Cu 4.15, Si 0.1-0.5%, and the balance Al. Best results were obtained when the ratio of substituted Ni to Fe, which took its place, was not less than 2:1; e.g.: Ni 0.61, Fe 1.02, Cu 4.00, Mg 1.53, and Ti 0.17, or Ni —, Fe 0.89, Cu 3.89, Mg 1.39, Ti 0.60%, and the balance Al. In the former (I) alloy 1.44 (i.e., 1.95 minus 0.51) parts of Ni were substituted by 0.77 (i.e., 1.02 minus 0.25) parts of Fe and in the latter (II) alloy 1.95 parts of Ni were substituted by 0.64 (i.e., 0.89 minus 0.25) parts of Fe. The amt. of Si in all cases was the same. The strength of II was nearly the same and the strength of I was even better than that of alloy Y. It is thought that this behavior lies in a greater accommodation of electrons in Fe (2.66 per atom) than in Ni (0.66 per atom). The Ni content >1% hinders the growth of crystals; with less Ni, Ti had to be introduced to hinder the growth of crystals. The coeff. of thermal expansion of I is 24.01 at 20-100°, 25.94 at 20-300°, and  $27.80 \times 10^{-6}$  at 20-600°; hence it is approx.  $1.3 \times 10^{-6}$  higher than for alloy Y.

Frank J. Hendel

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② JSH

SKORSKI, ROMAN

POL.

Thermochemical treatment of steel in molten salts containing titanium. Roman Skórski (Inst. Met. Aparatury Nauk. Lab., Warsaw). Prace Inst. Mech. 4, No. 12, 23-35 (1957) (English summary).—Treatment of steel by submerging it for few hrs. in a molten mixt. of  $\text{Na}_2\text{CO}_3 + \text{TiO}_2$  produced a high degree of carburization (I) and covered the metal with a corrosion-resistant film (C.A. 48, 95b). Mixts. contg. the following quantities of  $\text{TiO}_2$  were used: 70 (resulting in  $\text{Na}_2\text{Ti}_2\text{O}_7$ ), 60 (resulting in  $\text{Na}_2\text{Ti}_2\text{O}_7$ ), 46, 43 (resulting in  $\text{Na}_2\text{TiO}_5$ ), 30, 20, 10, and 5%. Their m.ps. were 1000°, 1000°, 850°, 800°, 820°, 820°, 820°, and 830°, resp. (accuracy  $\pm 20^\circ$ ). Cast iron and steel crucibles were the best and lasted many months; their internal diam. was 2.5, height 12, and wall thickness 0.3 cm. I ability of molten salt baths dropped rapidly with time, unless their surface was covered with charcoal. I was more rapid in salt mixts. of lower m.p. When  $\text{TiO}_2$  was not present in the bath then I was practically nil. With the rise in temp. of each bath, I of steel increased; however, at high temp. grain size did not increase and even became finer (especially at 900-1000°). Superiority of these baths over commercially applied ones lies in a deeper and more rapid I. This is because of their great wetting ability, so that the mixt. easily penetrates all pores of treated steel; the pores are then filled tight and the steel becomes stronger. E.g., a wire contg. C 0.035, Si 0.02, Mn 0.34, P 0.041, and S 0.045% was kept in a bath contg.  $\text{TiO}_2$  20 and  $\text{Na}_2\text{CO}_3$  80% for 2 hrs. at 950°. After I it contained C 0.44% and its bending strength was greater than when the original wire acquired C 0.48% by treatment at 880° for 4 hrs. In a commercially used mixt. of  $\text{Na}_2\text{CO}_3$  60,  $\text{BaCO}_3$  20, NaCl 10, and C 10%. S. points out that an improper compn. of the mixt.  $\text{TiO}_2 + \text{Na}_2\text{CO}_3$  may cause corrosion of the treated steel; this is because of the reaction  $\text{Fe} + \text{CO}_2 \rightarrow \text{FeO} + \text{CO}$ ; other reactions involved are:  $\text{CO}_2 + \text{C} \rightleftharpoons 2\text{CO}$ ;  $\text{TiO}_2 + \text{C} \rightarrow \text{Ti} + \text{CO}_2$ ; and  $\text{TiO}_2 + \text{Na}_2\text{CO}_3 \rightarrow \text{Na}_2\text{TiO}_5 + \text{CO}_2$ .

Frank J. Hendel

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SKORSKI, R.

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Distr 4E2c

Metasomatism in Metallurgy. R. Skórski (*Prace Inst. Mech.*, 1957, 6, (20), 65-68).—[In Polish]. Metasomatism—a geological phenomenon in which change of chem. compn. occurs without change of lattice structure is also observed in metallurgy. A typical example is the deposition of  $\beta$ -Ti on ferrite that occurs on immersion of Fe in a molten  $\text{TiO}_2$ -Na $_2\text{CO}_3$  mixture. The structure of the ferrite grains is unchanged, although the new grain is either Fe or an Fe-Ti alloy. Another example of metasomatism is the formation of Bi-Mn alloy. This alloy, which exhibits very good magnetic anisotropy, can be obtained by immersing a piece of Mn in molten Bi at 800° C. The alloy produced contains 70% Bi. The dimensions of the Mn specimen are unchanged, but there is an increase in weight from 32.5 to 88 g. Although the original Mn sample was of irregular shape, the residual core of Mn after immersion was spherical. There was a well-defined interface between the alloy and the residual Mn, unlike that met with in other met. diffusion processes.—A. W.

dm

*SKORSKI, ROMAN*

POLAND/Magnetism - Ferromagnetism

F-4

Abs Jour : Ref Zhur - Fizika, No 6, 1958, No 13340

Author : Skorski Roman

Inst : Not Given

Title : Annealing of Iron and Steel (0.45% Carbon) in Magnetic Field

Orig Pub : Prace Inst. mech., 1957, 6, No 21, 32 s., 111

Abstract : It was established experimentally that heat treatment of polycrystalline specimens of iron and steel, in the presence of a magnetic field, causes anisotropy of themechanical and chemical properties.

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P/035/61/000/013/002/002  
D203/D305

Magnetothermal treatment...

Warszawkiej (Department of Metal Physics, Warsaw Polytechnic) and were later (1955) continued at the Instytut mechaniki precyzyjnej (Precision Mechanics Institute). The subject has aroused general interest in Poland and a conference, based on the present paper was held at the Huta Baildon (Baildon Metallurgical Plant) on January 30, 1961. Recent American work (Refs. 6, 7 and 8) confirms the author's 1957 results. Between 723 and 770°C steel consists of ferromagnetic ferrite and paramagnetic austenite, the former being strongly affected by magnetothermal treatment. The present work was divided into (a) the effect of Armco iron, and (b) the effect on steel. The experiments were carried out between 630 and 740°C and at 10-20 to 600 oersteds. Control tests were also run above the Curie point (800°C), heated samples were oriented parallel to or across the magnetic field and were subsequently tested mechanically and metallographically. Effects on the hardening process and the critical points of steel were also noted. The apparatus consisted essentially of a 40 mm int. dia. resistance furnace capable of operating at 1000°C with a coil (water-cooled copper tubing) producing a field of 0 - 2000 oersteds. The coil was

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D205/D305

Magnetothermal treatment...

powered by rectified current (0-30 amp) or alternating current from the mains through an autotransformer (up to 100 amp). The samples, whose composition is given in Table 1,

Table I: Chemical composition of the materials tested.

- b) Material c) Diameter of the rod d) Chemical composition (%)
- e) Armco iron f) T45 steel
- g) Iron wire h) Nickel wire

TABLICA I. Sklad chemiczny badanych materialow

Material	Sred- nica pręta w mm	Sklad chemiczny w %							
		C	Mn	Si	S	P	Ni	Cr	Mo
Zelazo Armco	8	0,01	0,017	0,02	0,028	0,05	-	-	-
Stal T45	30	0,45	0,61	0,36	0,013	0,017	0,06	0,03	0,00
Drut zelazny	3	0,03	0,017	0,03	0,004	0,05	-	-	-
Drut niklowy	3	-	0,2	0,01	0,005	-	99	Fe+Co- 0,6%	-

were sealed into partially evacuated (~10 torrs) Jena glass tubes which were placed in a porcelain crucible, vertically or horizontally, and immobilized with sand. The tensile strength measurements (Chevenard microtensometer) are tabulated also. A pronounced mechanical anisotropy was induced and this was confirmed by the metallographic examination. Analogous results were obtained for

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D205/D305

Magnetothermal treatment...

Rockwell hardness (scale A) were determined. The results are shown in Table II

TABLICA II. Wynik prób rozciągania stali T45 hartowanej po znormalizowaniu.

Table II: Tensile properties of T 45 steel, which was hardened after normalizing 2) Mean hardness HRA 3) Tensile strength  $R_r$  (kg/mm<sup>2</sup>) 4) Elongation  $a_4$  (%) 5) Reduction in area  $c_4$  (%) 6) Remarks 7) Sample broke at the grip

Twardość średnia HRA	Wytrzymałość na rozciąganie $R_r$ kg/mm <sup>2</sup>	Wydłużenie $a_4$ %	Przewężenie $c_4$ %	Uwagi
57	203	0	0	
78	215	0	0	
77	204	-	-	próbka urwana przy główce
75	202	-	-	próbka urwana przy główce
78	190	0	0	
74	199	-	-	próbka urwana przy główce
76	210	2	0	
78	205	0	0	
78	210	2	0	
79	220	3	0	

(steel normalized and then hardened) and Tables III and IV (magnetothermal treatment). Heating a hardened steel which possesses a high resistance to stretching in a magnetic field induces high plasticity, whilst ordinary hardened steel is non-plastic.

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D203/D305

Magnetothermal treatment...

The degree of induced plasticity is little affected by the strength of the field since the magnetic permeability of iron increases more quickly in a weaker field and the magnetic induction is independent of temperature up to the Curie point. Magnetothermal treatment of steel may have beneficial effects similar to those of chemical additives and may, therefore, displace the critical points. This was not confirmed. To determine whether the treatment could lower the hardening temperature, 4 samples were heated for 1 hour at 810°C in a magnetic field, cooled to 760° and held there for 10 mins., quenched and tested. The tabulated results indicate that this procedure does allow hardening from lower temperatures. Further tests showed that the degree of hardening was unaffected by heating in a magnetic field. The results may be explained by the formation of a more ordered structure both in the ferrite and in the austenite. According to Kurdyumov's views (10, 11), this would affect the martensite transformation. Tempering the magneto-thermally treated steel at 260°C for 2 hours did not increase the plasticity but lowered the tensile strength. There are 6 tables and 7 figures.

ASSOCIATION: Instytut mechaniki precyzyjnej, Warszawa (Precision  
Card 7/7 Mechanics Institute, Warsaw)

KRUPNOV, A.F.; SKORTSOV, V.A.

Observation of the radiation line of the formaldehyde molecule at a frequency of 72.8 Mc. Izv. vys. ucheb. žav; radiofiz. 5 no.3:611-612 '62. (MIRA 15:7)

1. Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete.  
(Formaldehyde—Spectra)

MASTEROV, Ivan Petrovich, bul'dozerist; SKORUBSKAYA, I.N., redaktor; RAKOV,  
S.I., tekhnicheskii redaktor

[Bulldozers in building hydroelectric power stations] Bul'dozery na  
stroitel'stve gidrostantsii. [Moskva] Izd-vo VTsSPS Profizdat, 1956.  
35 p. (MLRA 10:4)

1. Kakhovka Gidroelektricheskaya stantsiya (for Masterov)  
(Bulldozers) (Kakhovka Hydroelectric Power Station)

POSTARNAKEVICH, Ivan Vladimirovich; SKORUBSKAYA, I.N., redaktor; RAKOV, S.I.,  
tekhnicheskiiy redaktor

[Boring machines] Na rastrochnykh stankakh. [Moskva] Profizdat, 1956.  
47 p. (MLRA 9:12)

1. Rastrochnik Odesskogo stankostroitel'nogo zavoda imeni S.M.Kirova.  
(Drilling and boring machinery)

VAVILOV, Nikolay Dmitriyevich; SKORUBSKAYA, I.N., redaktor; KIRSANOVA, N.A.,  
tekhnicheskly redaktor

[Our experience in hardening steel] Nash opyt zakalki stali. [Moskva]  
Izd-vo VTsSPS Profizdat, 1956. 62 p. (MIRA 9:12)

1. Brigadir termicheskoy brigady instrumental'nogo tsakha zavoda  
sel'khoz mashin imeni Ukhtomskogo. (for Vavilov)  
(Steel--Hardening)